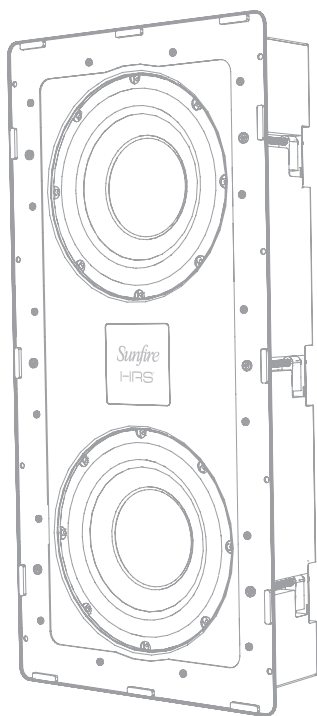
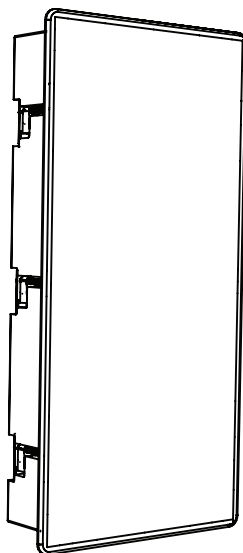


Sunfire® | I-IRS™



*High Resolution Series
In-Wall Subwoofer*




HRSIW8


User's Manual


Important Safety Instructions

1. Read Instructions.
2. Keep these Instructions.
3. Heed all Warnings.
4. Follow all Instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
8. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as a connector is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
9. Object and Liquid Entry — Care should be taken so that objects do not fall into and liquids are not spilled into the inside of the apparatus.




WARNING: THIS LOUDSPEAKER IS CAPABLE OF PRODUCING VERY HIGH SOUND PRESSURE LEVELS. YOU MUST TAKE EVERY PRECAUTION TO PROTECT YOUR HEARING FROM PERMANENT DAMAGE.

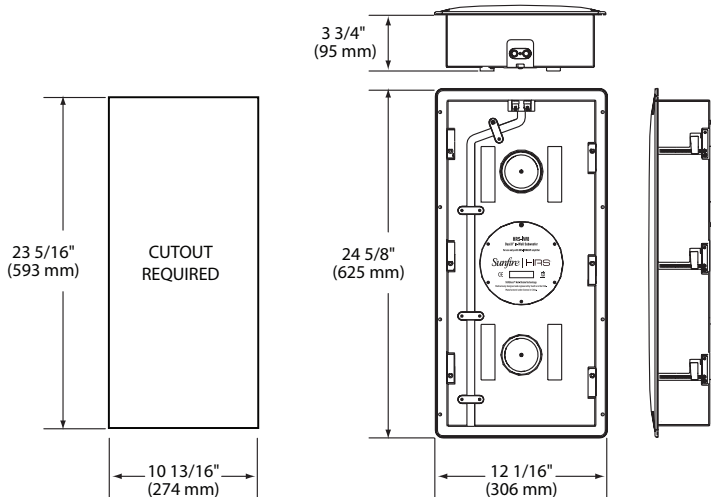




This subwoofer is designed to be powered only by the Sunfire HRSIW8 amplifier. No other amplifier should be connected to the subwoofer, as this may lead to serious damage to your equipment.



Dimensions



Contents

Safety Instructions.....	2
Introduction	3
Unpacking	3
Rear Panel Features	5
Front Panel Features	6
Location.....	7
Installation	9
System Configuration	10
Subwoofer Installation.....	11
Specifications	14
Limited Warranty	15
Service Assistance	15

Introduction

Thank you for purchasing this Sunfire High Resolution Series HRSIW8 in-wall subwoofer. We hope you enjoy it and the music it makes as much as we have enjoyed creating it for you.

The companion HRSWI8 amplifier is designed to supply speaker-level power to the HRSIW8 in-wall subwoofer, to produce stunning low frequency effects for your home theater.

This guide gives an overview of the features of your subwoofer. Further details of the system are supplied in the manual provided with the Sunfire HRSIW8 amplifier.

Unpacking

Your Sunfire subwoofer should reach you in perfect condition. If you do notice any shipping damage, please contact your Sunfire Dealer immediately.

Gently lift out the unit and remove all the packing material. It is important to save all the packing materials and the box in case your subwoofer ever needs to be moved or shipped for repair.

Make sure that you keep your sales receipt. It is the only way to establish the duration of your Limited Warranty and it may come in useful for insurance purposes.

Please take a moment to fill out and mail the Sunfire Customer Response card. Also read the serial number located on the rear panel and record it here:

Serial Number:	
Purchased from:	
Date:	

For more information on this and other Sunfire products,
please visit our website: **www.sunfire.com**

Features

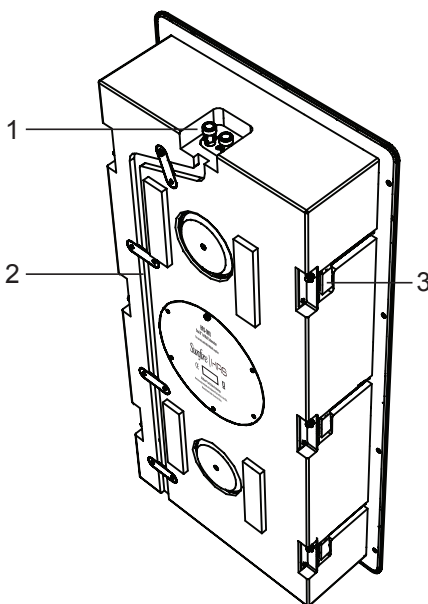
- Sealed cabinet
- High pressure design
- Dual 8 inch woofers
- Fiberglass cones
- StillBass™ anti-shake technology
- Gold plated spring terminals
- Rear channel for securing the speaker wires
- Designed for in-wall mounting with six wall clamps
- Wall cut-out template supplied
- Removable grill attaches with magnets and is easily removable for painting
- Designed to be powered exclusively by the Sunfire HRSIW8 amplifier, which is a 500 Watt, all-discrete Class-D switching power amplifier

Care

To maintain the subwoofer's finish, first turn off the amplifier and then use a soft dry cloth to clean the grille surface. The grille can be removed to clean it, if required.

If your Sunfire subwoofer ever needs servicing, please contact your nearest authorized Sunfire Dealer.

Rear Panel Features



1. Binding Posts

The subwoofer has one pair of binding posts for connection with speaker wire to the output posts of the Sunfire HRSIW8 amplifier.

Always use high quality connections and speaker wires, and make sure there are no loose fittings or stray wire strands. The spring connections accept bare wire or pins.

Connect the positive speaker-level output of the HRSIW8 amplifier to the positive (red) input of the subwoofer. Connect the negative speaker-level output of the HRSIW8 amplifier to the negative (black) input of the subwoofer.

Make sure that the positive and negative connections do not touch, or this may damage your power amplifier.

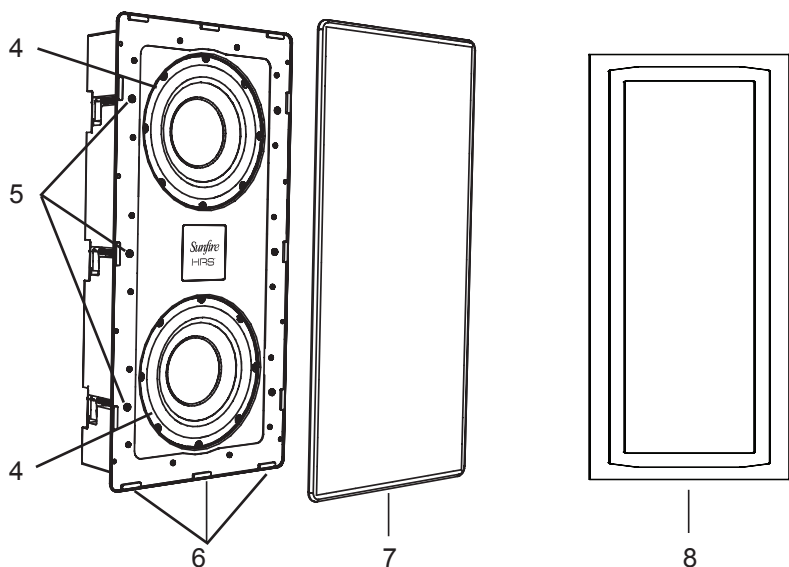
2. Speaker Wire Channel

To ease installation, the speaker wiring are passed through these channels to the binding posts. This is recommended as the channel will support the weight of the speaker cable, so it does not pull on the binding posts.

3. Clamps

Once the subwoofer is pressed into an opening in the sheetrock, screws on the front panel are turned to pull the clamps out and down to press against the sheetrock, and secure the subwoofer in place.

Front Panel Features



4. Woofers

The HRSIW8 uses two identical 8 inch custom drivers.

5. Clamp Screws

These six screws are used to clamp the loudspeaker in place once it has been pressed into the sheetrock opening of your wall.

6. Grille Magnets

The grille is attached to the main body with small magnets around the edge of the subwoofer baffle.

7. Grille

To remove the grille, gently pry it away from the corners and release it from the magnets holding it in place. The grill can be painted to match the room decor.

8. Cutout Guide

This guide allows you to easily mark the required cutout onto your wall.

Location

The suggestions below will typically result in outstanding performance. However, although low frequencies are non-directional, factors such as room reflections, standing waves, resonance and absorption will strongly affect your subwoofer's performance.

Since your Sunfire subwoofer is designed to be professionally installed into your wall, engineering services from your authorized Sunfire dealer and/or outside acoustical resources should be considered to ensure optimum performance.

The Sunfire HRSIW8 amplifier's DSP features will tailor the sound to the room for optimum performance in the location you choose. Controls include the cross-over frequency, and slope, phase, and subsonic filter



Keep the subwoofer at least two or three feet away from any TV screen, computer, VCR or magnetic tapes and discs. This will reduce the chance of the magnetic fields upsetting the TV screen or erasing your magnetic media.

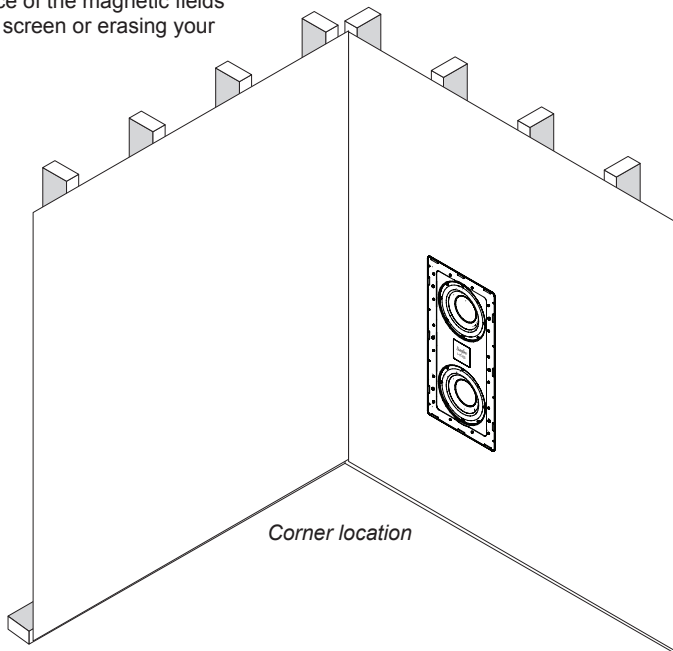
Preliminary

Before cutting a hole in your wall, it is always best to test the subwoofer in that location first. Place it on the floor near to the "possible" location, and connect it to the Sunfire HRSIW8 amplifier. Play some typical bass passages through the subwoofer. This will help you identify any problems in the sound due to the location, and you may be able to find a location that sounds better.

Corner installation

Installing the subwoofer on the front wall, towards the corner will reinforce the low frequencies. This is best suited for:

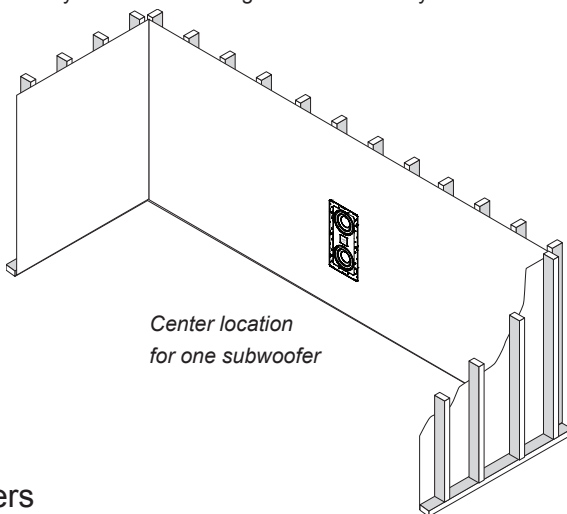
- Rooms larger than 200 square feet where a single subwoofer will be used
- For dedicated home theaters
- For listeners who enjoy "heavy" bass.



Center location

Installing the subwoofer closer to the center of the front wall will still provide adequate bass, but will tend to be less “heavy” and somewhat tighter. This is ideally suited for:

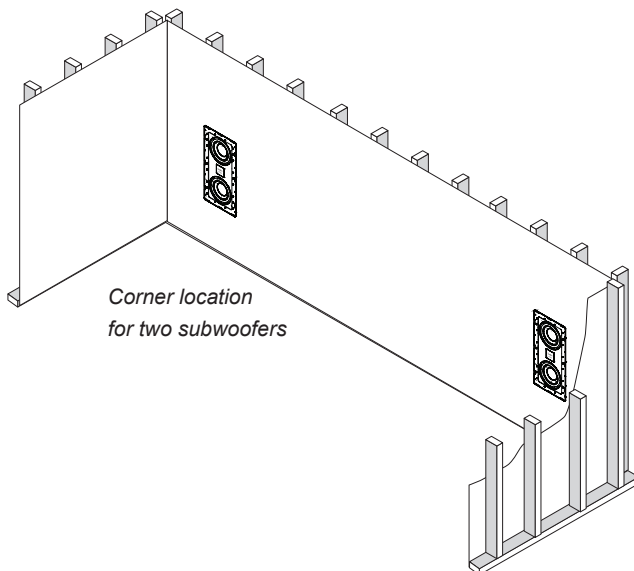
- For rooms smaller than 200 square feet
- Dedicated music listening rooms.



Using Two Subwoofers

If you wish to use two subwoofers, the sound output will double. Each subwoofer will need its own dedicated Sunfire HRSIW8 amplifier.

Locating the subwoofers on the front wall, with one towards each corner will provide more flexibility in crossover points, without causing localization that can happen with subwoofers located on side and rear walls. Sunfire preamplifiers and receivers feature multiple subwoofer outputs for these applications. If your preamplifier has a single sub/LFE output, use a Y cable to split it into two outputs, one for each amplifier.



Installation



Read and follow all instructions and all important safety instructions in the HRSIW8 amplifier manual. Here follows a summary of the amplifier installation notes:

- The amplifier may be rack mounted using the supplied rack ears. It will fit into a standard 1U, 19 inch rack space. Allow a minimum of 1 free rack space above and below for ventilation. This is very important.
- The amplifier may also be placed on a shelf, supported on its feet. Make sure it is not placed on carpeting or similar that may obscure its ventilation openings.
- Never open the amplifier cabinet as this might result in an electrical shock to you, or damage to the unit. There are no user-servicable components inside.
- Protect the amplifier from prolonged exposure to direct sunlight and other direct sources of heat, such as heating vents and radiators.
- To prevent fire or shock, do not expose the amplifier or subwoofer to rain or moisture. If fluid or a foreign object should enter either unit, immediately turn off the power and contact your Sunfire Dealer.
- Avoid excessive exposure to extreme cold or dust.
- Do not place heavy objects on top of the amplifier.

Heat rise

- Allow adequate ventilation around the top and sides of the amplifier.
- Allow adequate ventilation if you are rack-mounting the amplifier.

AC Power Considerations

Ensure that the amplifier is plugged into an outlet capable of supplying the correct voltage specified for your model.

Unplug your amplifier's power cord from the electrical outlet if it will be left unused for a long period of time.

Route the power-supply cord so it is not likely to be walked on or pinched by items placed upon or against it, especially at plugs, convenience receptacles, and the point where it exits from the unit.

Before making or changing any connections, ALWAYS make sure that the amplifier and your other components are turned OFF. Also turn down the volume control of the subwoofer amplifier and your preamplifier or receiver.

Speaker Level connections

The amplifier's speaker level outputs can accept speaker wires with banana, dual-banana, bare wire, pins or spade terminals. If you have banana type connectors on your speaker wire, make sure that you tighten the binding posts before inserting.

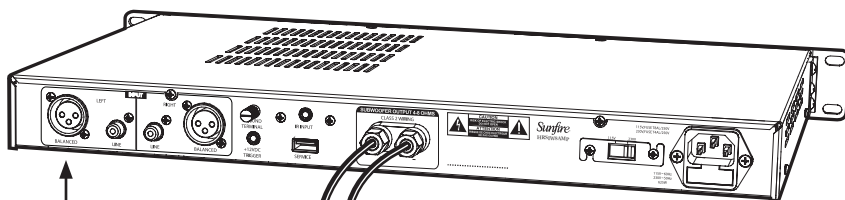
Make sure that the negative speaker wires never touch the positive wires as this will short out and possibly damage your amplifier.

Magnetic Fields

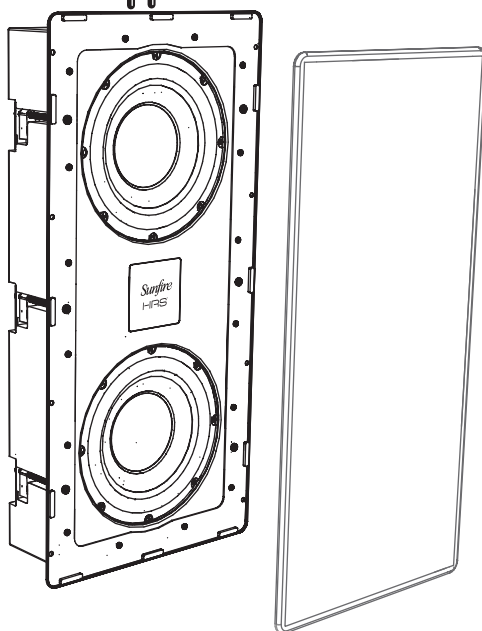
We recommend that you place your subwoofer further than two feet away from your TV, VCR, tape deck or computer, so the speaker's magnet won't distort the colors of your TV picture or erase your video tapes, audio tapes or computer discs.

System Configuration

HRSIW8 Amplifier



Connect balanced or unbalanced inputs to the SUB/LFE line-level output of your home theater preamplifier or receiver.



HRSIW8 In-Wall Subwoofer

Subwoofer Installation

Read the details on page 7 to help determine the best position for your subwoofer in the room.

The subwoofer can be wall mounted vertically, centered between vertical wall studs. This is the recommended (and easiest) orientation to install.

Horizontal mounting into existing construction will most likely mean cutting a vertical stud. This installation should be done by an experienced and qualified carpenter, to prevent weakening the wall structure. When the extra framing is done, the installation and wiring is the same as described below.

Tools required:

- Phillips screwdriver
- Pencil or other suitable wall marker
- Sheetrock hand saw
- Safety glasses
- Level
- Masking tape
- Flashlight
- Small mirror
- Electronic stud finder if needed
- You may need an assistant.

Preliminary steps:

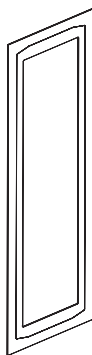
- If the TV display is in place nearby, it should be removed from the wall, or at least turned off and covered.
- Clear the area where you are going to work, so it will be safe. Remove any fragile objects, small children or pets, and cover anything that might be affected by dust from cutting sheetrock.
- Put on your safety glasses.

Marking and cutting the opening

1. Choose the best location for your subwoofer, preferably centered between vertical wall studs. Use a stud finder to find where the studs are.

Do not position the subwoofer closer than one inch from the cabinet sides to a stud. This allows for the clamps to swing out.

2. Tape the supplied cutout template onto the wall surface, and use a level to make sure it is vertical.
3. Mark the sheetrock with a pencil around the inside of the template, and remove the template.
4. Turn off the electricity to the room, just in case you accidentally cut a live AC mains wire.



Marking the opening onto the wall using the inside of the template

5. Drill a small pilot hole, and using a flashlight and small mirror, look for any obstructions such as water pipes, gas lines, or electrical wires that may interfere with the subwoofer installation.
6. If all is clear, carefully cut out the sheetrock around the marked lines, and remove any debris from the hole.

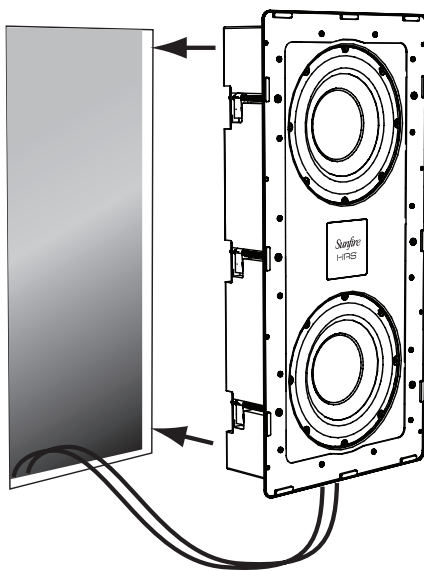
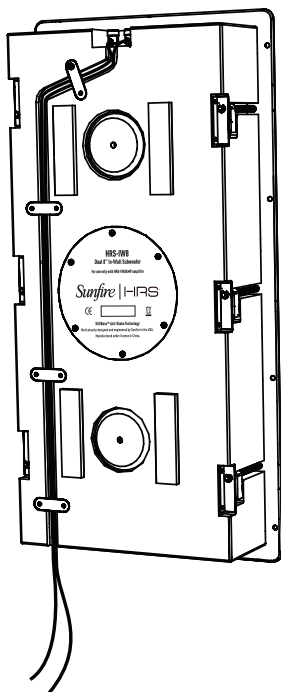
Wiring

The HRSIW8 amplifier has two binding posts for connection to the HRSIW8 subwoofer.

1. Install the speaker wires following all local codes for low voltage electrical wiring installation. Use class 2 wiring, and 12 gauge is recommended, 16 gauge is the minimum.
2. Follow common low voltage practices like avoiding high voltage electrical wiring, or if this is not possible, try crossing them perpendicularly. This will reduce the chance of picking up hum or other interference.
3. If required, pass the wiring through the speaker wiring channels in the back of the subwoofer.
5. Secure the wiring to the loudspeaker's spring-loaded binding posts, observing the correct polarity. Gently pull on them to make sure they are secure.
6. It is a good idea to secure the wiring from vibration as much as possible. Do not have the weight of the cables hanging on the terminals. Try using heavy duty electrical staples to hold the speaker cable securely to the studs.

Installing the Subwoofer

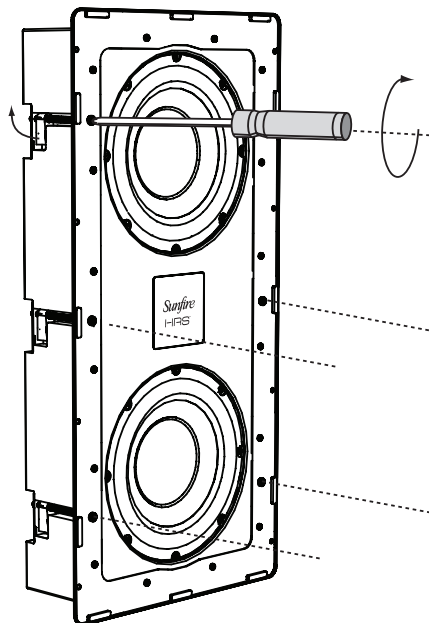
1. Press the subwoofer into the sheet-rock opening making sure that the speaker wires do not get pinched or cut.



4. Do an electrical continuity test to make sure the connections are good from the amplifier-end of the speaker wire to the ends of the wires at the subwoofer.

2. Screw in the six clamp screws. As the screw turns clockwise, a clamp rotates out and presses onto the back of the sheetrock to hold the subwoofer firmly in place.

Tighten the clamps so they are snug, but do not overtighten, as they could damage the sheetrock.



Tightening the clamps
(sheetrock not shown, for clarity)

Final steps

1. Add the grille to cover and protect the woofers.
2. The grill can be painted if desired, and this best done when it is not attached to the subwoofer.
3. Enjoy your new subwoofer.

Specifications

Design

Sealed Cabinet, High Pressure Design.
To be used with the dedicated HRSIW8 amplifier only. StillBass™ anti-shake technology.

Drive Units

Dual 8" Woofers with fibreglass cones

Connections

1 pair gold plated spring terminals

Dimensions

(Maximum dimensions, including grille)

Height	24 5/8" (625 mm)
Width	12 1/16" (306 mm)
Depth	3 3/4" (95 mm) from back of steel bezel to rear of cabinet)
Cutout	23 5/16" x 10 13/16" (593 x 274 mm)
Weight	32 lbs (14.51 kg)

The following specifications are from the HRSIW8 amplifier owner's manual:

Frequency Response

33 Hz - 150 Hz (-3 dB)

Crossover Frequency

The DSP section of the amplifier allows the high cut filter to be adjusted from 40 Hz - 160 Hz, with an LFE bypass position, and 12 to 36 dB/octave adjustable slope

Maximum Power

520 watts rms

Maximum Output

Greater than 106 dB peak SPL (includes room gain) Measured at 1 meter, anechoic

Troubleshooting

The HRSIW8 subwoofer is designed and built to provide years of trouble-free performance. Most problems that occur can usually be solved by checking your setup, or by making sure all components are fully operational.

The following information will help you deal with common problems you may experience. If a problem persists, please contact your Dealer for assistance.

Poor or no sound

- Check all the connections from the subwoofer to the amplifier.
- The speaker is designed to be powered only by the Sunfire HRSIW8 amplifier. No other amplifier should be used as the performance will suffer, and possible damage to the speaker will occur.
- Check that the amplifier is not driven too hard.
- Many processor/preamps can send test tones through all the loudspeakers in your system. Use this to adjust the volume of each channel until they are all playing at the same level. Make sure that any bass management options are set correctly.
- If the system bass is weak only when playing surround sources, check that your processor is correctly set to decode the surround modes, such as Dolby Digital or DTS.
- Some DVD discs have a menu that allows you to select which soundtrack to play. Check that the correct surround audio soundtrack is selected.

© 2012 Sunfire Corporation.
All rights reserved. Sunfire Corporation reserves the right to improve its products at any time. Therefore, specifications are subject to change without notice.

Manual 9901236 Rev A

Sunfire Limited Warranty

Sunfire, a division of The AVC Group, LLC, is proud of its products which have been built with care using advanced technology and premium component parts. Your unit has been crafted to perform properly for many years. Sunfire offers the following Warranty to you, the owner of a new Sunfire product:

Sunfire warrants the HRSIW8 Subwoofer to be free from defects in materials and workmanship for the period of ONE year from the date of purchase. If within the applicable warranty period above purchaser discovers such item was not as warranted above and promptly notifies Sunfire in writing, Sunfire shall repair or replace the items at the company's option.

This warranty shall not apply:

- (a) to equipment not manufactured by Sunfire.
- (b) to equipment which shall have been installed by other than an authorized Sunfire installer.
- (c) to installed equipment which is not installed to Sunfire's specifications.
- (d) to equipment which shall have been repaired or altered by others than Sunfire.
- (e) to equipment which shall have been subjected to negligence, accident, or damage by circumstances beyond Sunfire's control, including, but not limited to, lightning, flood, electrical surge, tornado, earthquake, or any other catastrophic events beyond Sunfire's control, or to improper operation, maintenance or storage, or to other than normal use of service.

With respect to equipment sold by, but not manufactured by Sunfire, the warranty obligations of Sunfire shall in all respects conform and be limited to the warranty actually extended to Sunfire by its supplier. The foregoing warranties do not cover reimbursement for labor, transportation, removal, installation, or other expenses which may be incurred in connection with repair or replacement.

Except as may be expressly provided and authorized in writing by Sunfire, Sunfire shall not be subject to any other obligations or liabilities whatsoever with respect to equipment manufactured by Sunfire or services rendered by Sunfire.

THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESSED AND IMPLIED WARRANTIES EXCEPT WARRANTIES OF TITLE, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

ATTENTION: TO OUR VALUED CONSUMERS

To insure that consumers obtain quality pre-sale and after-sale support and service, Sunfire products are sold exclusively through authorized dealers. Sunfire products are not sold online. The warranties on Sunfire products are NOT VALID if the products have been purchased from an unauthorized dealer or an online E-tailer.

Service Assistance

We suggest that you read the Limited Warranty completely to fully understand your Warranty/Service coverage.

If your Sunfire product ever requires service, contact your nearest Sunfire authorized dealer first. If, for any reason, you are unable to receive service from your dealer you may write to us:

Sunfire,

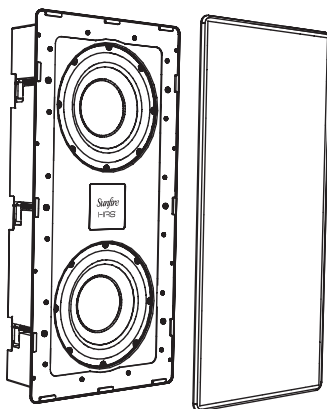
The AVC Group / Return Center,
2040 Creative Drive, Ste. 100
Lexington,
KY 40505-4304

You will be directed to an authorized Sunfire Service Station or receive instructions to ship the unit to the factory. Please save the original shipping carton and packing materials in case shipping is required. Please do not ship Parcel Post.

NOTE: Before sending in your unit for repair, you must call Sunfire for return authorization.

Include a complete description of the problem, indicating how you have it connected, the associated equipment in your system and a copy of your purchase receipt. Initial shipping costs are not paid by Sunfire; return ground shipping costs will be prepaid if repairs were covered by the scope of this Warranty.

Sunfire® | H-IRS™



High Resolution Series
In-Wall Subwoofer
HRSIW8

Sunfire
1969 Kellogg Ave., Carlsbad, CA 92008
www.sunfire.com